Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-4 (withdrawn)

Claim 5 (cancelled)

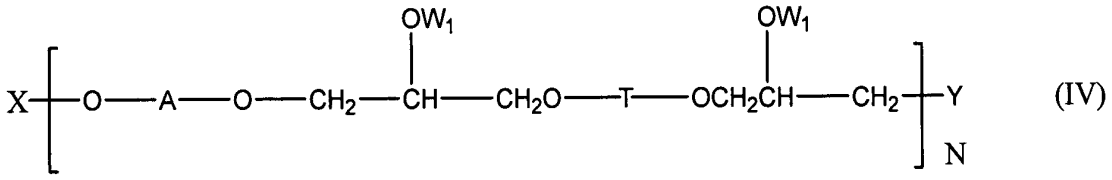
Claim 6 (cancelled)

Claim 7 (withdrawn)

Claim 8 (cancelled)

Claim 9 (new): A photoresist formulation comprising:

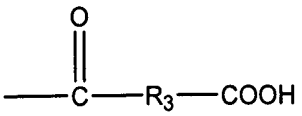
(a) a carboxyl group-containing epoxy acrylate of formula IV

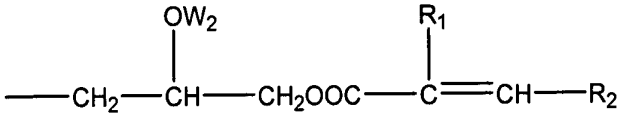


(IV)

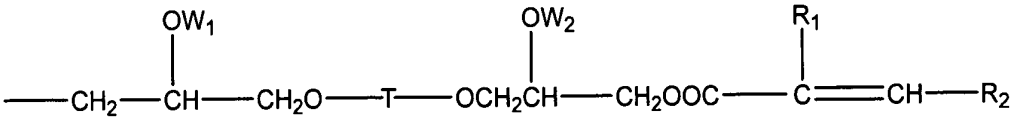
wherein

X is hydrogen or a group of formula



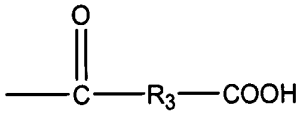


or

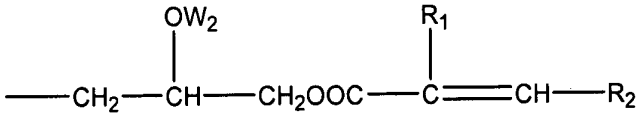


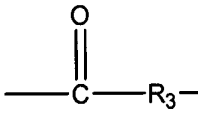
R_3 is the radical of succinic acid anhydride after removal of the anhydride radical,

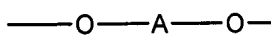
W_1 is hydrogen or a group of formula

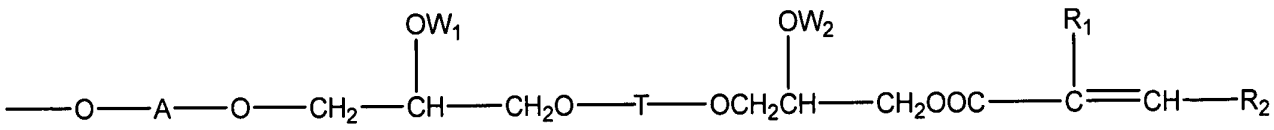


or



W_2 is -H or the group  ,

Y is the group of formula  , or



A is the radical of an aromatic bifunctional compound,

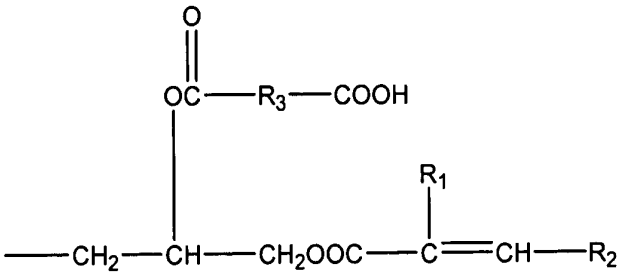
T is the radical of an aromatic bifunctional compound,

R_1 is -H or -CH_3,

R_2 is -H, -CH_3 or phenyl,

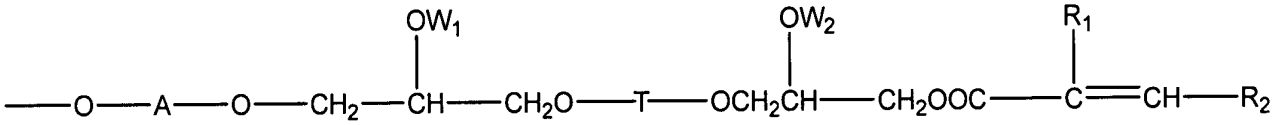
n is an integer from 0 to 300,

with the proviso that, in formula IV, at least 10 mol % of radicals W_1 that are not in the end groups X and Y are a group of formula



wherein R_1, R_2, and R_3 are as defined above,

and with the proviso that when n in formula IV is 0, then X is hydrogen and Y is the group of formula

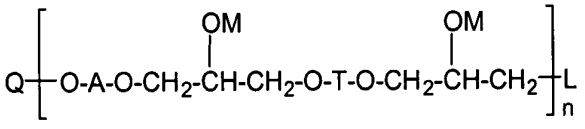


; and

b) a photoinitiator.

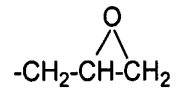
Claim 10 (new): The photoresist formulation of claim 9, wherein said carboxyl group-continuing epoxy acrylate of formula IV is prepared by reacting

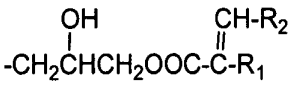
(a) an epoxy acrylate of formula III

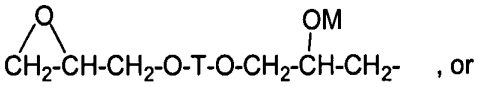


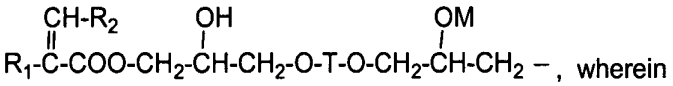
(III)

wherein Q is hydrogen or a group of formula







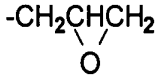


R_1 is –H or $–CH_3$,

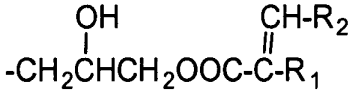
R_2 is –H, $-CH_3$ or phenyl,

T is the radical of an aromatic bifunctional compound,

M is each independently hydrogen or a group of formula



or



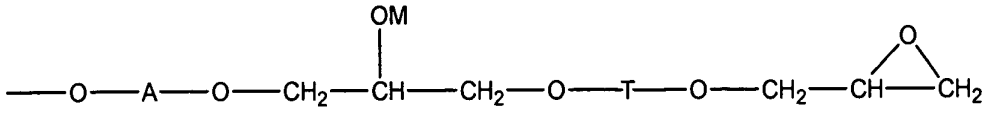
, in which

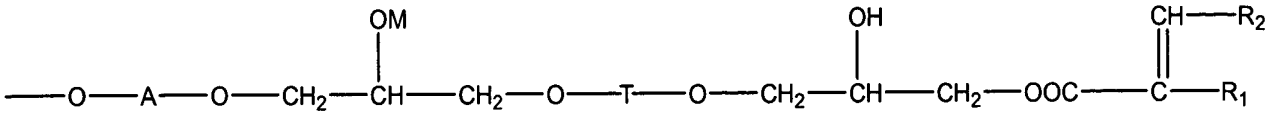
R_1 and R_2 are as defined above,

A is the radical of an aromatic bifunctional compound,

n is an integer from 0 to 300,

L is a group of formula

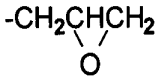




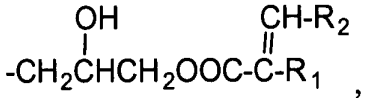
or

in which M, R_1 and R_2 are as defined above,

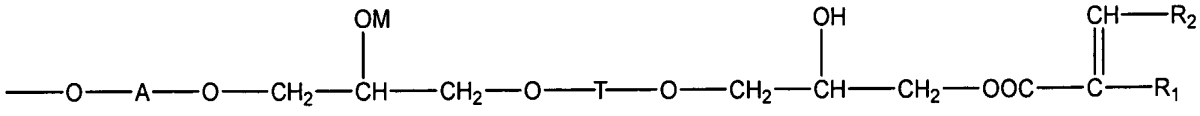
with the proviso that in formula III not all radicals M may be simultaneously hydrogen or a group of formula



but at least 10 mol % of the radicals M that are not present in the end groups Q and L are a group of the formula



and with the proviso that when n in formula III is 0, then Q is hydrogen and L is the group of formula

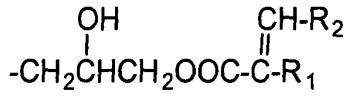


with

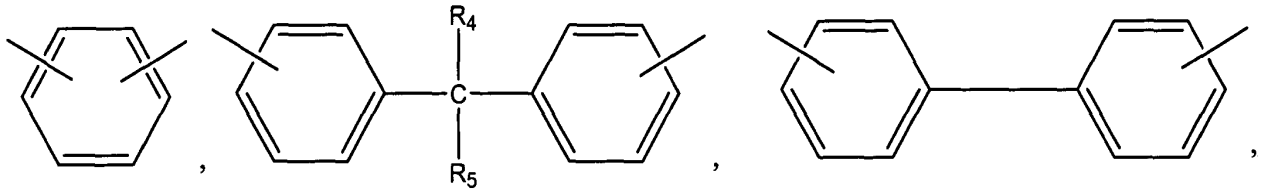
(b) succinic acid anhydride,

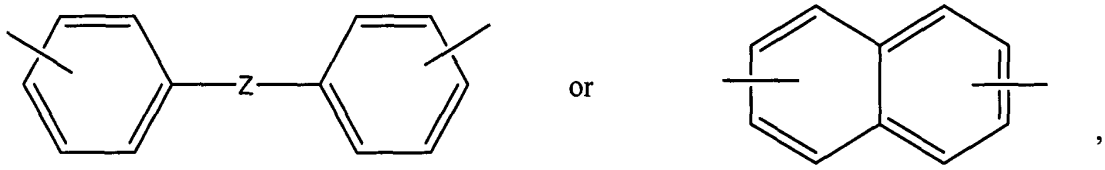
in the presence or absence of a catalyst and a polymerisation inhibitor, at elevated temperature.

Claim 11 (new): The photoresist formulation according to claim 10, wherein at least 20-100 mol % of the radicals M that are not present in the end groups Q and L of formula III are a group of the formula



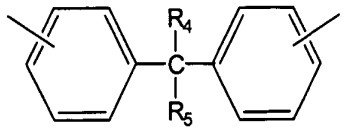
Claim 12 (new): The photoresist formulation according to claims 9 or 10, wherein A and T are each independently of the other a linking group of the formulae





in which R_4 and R_5 are each independently of the other –H or C_1-C_4 alkyl; Z is -S-, -O-, or -SO_2-; and the phenyl radicals of said linking groups are unsubstituted or substituted by halogen or C_1-C_4 alkyl.

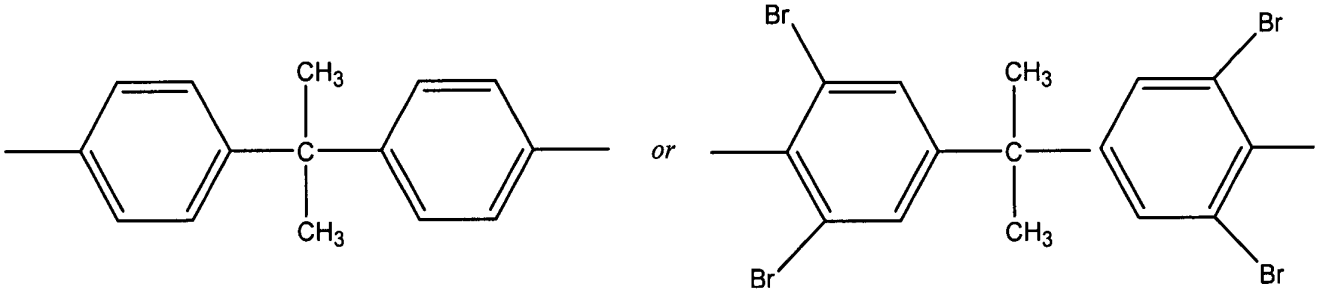
Claim 13 (new): The photoresist formulation according to claims 9 or 10, wherein A and T are each independently of the other a linking group of formula



wherein R_4 and R_5 are each independently of the other –H or C_1-C_4 alkyl, and the phenyl radicals of said linking group are unsubstituted or bromine-substituted.

Claim 14 (new): The photoresist formulation according to claim 13, wherein n is an integer from 0 to 50.

Claim 15 (new): The photoresist formulation according to claim 13, wherein A and T are each independently of the other a linking group of formulae



Claim 16 (new): The photoresist formulation according to claim 10, wherein said catalyst is selected from the group consisting of metal salts, amines and triphenylphosphine.

Claim 17 (new): The photoresist formulation according to claim 16, wherein said catalyst is selected from the group consisting of chromium salts, zirconium salts, triethylamine, benzyldimethylamine, pyridine and dimethylaminopyridine.

Claim 18 (new): The photoresist formulation according to claim 10, wherein an inert solvent is used in the reaction and said solvent is selected from the group consisting of ketones, esters, ethers, aromatic hydrocarbons, and mixtures thereof.

Claim 19 (new): The photoresist formulation according to claim 18, wherein the inert solvent is selected from the group consisting of acetone, methyl ethyl ketone, cyclohexanone, ethyl acetate, butyl acetate, ethoxyethyl acetate, methoxypropyl acetate, dimethoxyethane, dioxane, toluene, benzene, xylenes and mixtures of the foregoing.

Claim 20 (new): The photoresist formulation according to claim 10, wherein the elevated temperature is in the range from 60 to 140°C.

Claim 21 (new): The photoresist formulation according to claim 10, wherein the polymerisation inhibitor is selected from the group consisting of hydroquinone, hydroquinone monomethyl ether, and 2,6-di-tert-butyl-p-cresol.

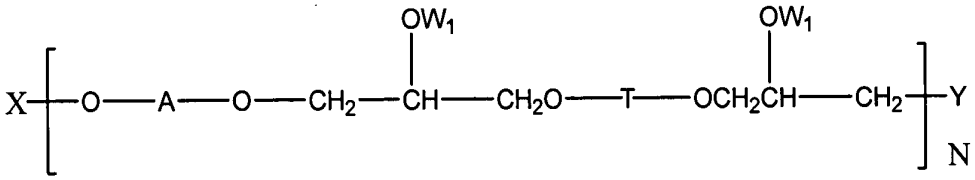
Claim 22 (new): The photoresist formulation according to claim 10, wherein air, or a mixture of nitrogen and oxygen, is introduced into the reaction medium.

Claim 23 (new): The photoresist formulation according to claim 10, wherein the succinic acid anhydride is used in equimolar amounts with respect to the hydroxyl groups, or in less than equivalent amount.

Claim 24 (new): The photoresist formulation according to claim 9, wherein the photoinitiator is 2-methyl-1-[4-(methylthio)phenyl]-2-morpholino-propane-1.

Claim 25 (new): A method for the preparation of a photoresist formulation, comprising the step of mixing

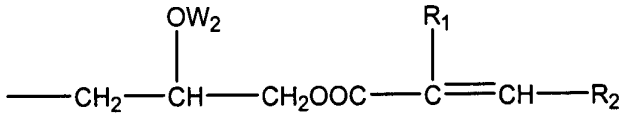
(a) a carboxyl group-containing epoxy acrylate of formula IV



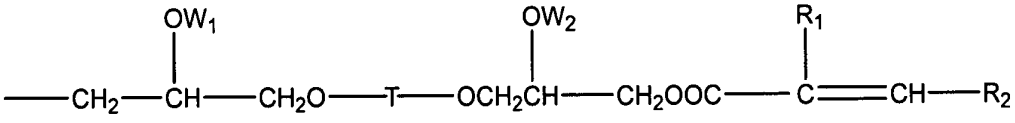
(IV)

wherein

X is hydrogen or a group of formula

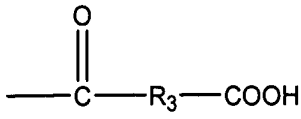


or

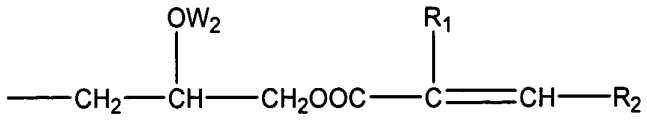


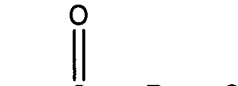
R_3 is the radical of succinic acid anhydride after removal of the anhydride radical,

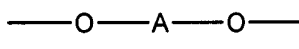
W_1 is hydrogen or a group of formula

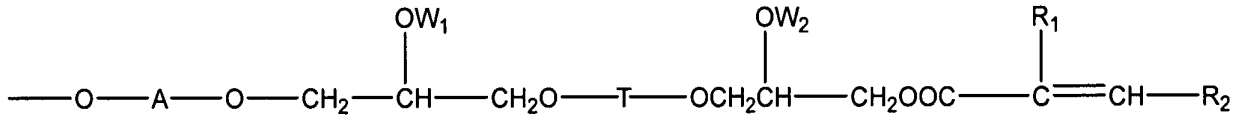


or



W_2 is -H or the group  , and

Y is the group of formula  , or



A is the radical of an aromatic bifunctional compound,

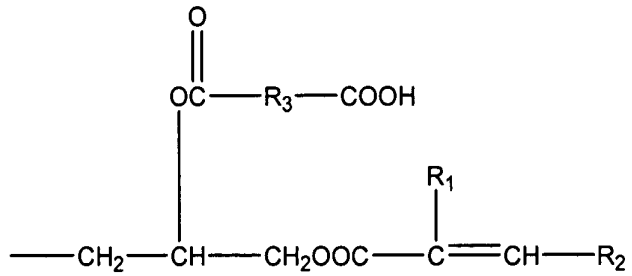
T is the radical of an aromatic bifunctional compound,

R_1 is -H or -CH3,

R_2 is -H, $-CH_3$ or phenyl,

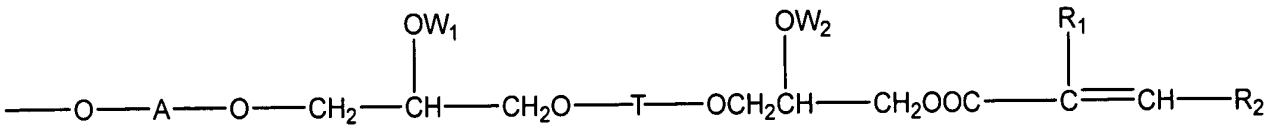
n is an integer from 0 to 300,

with the proviso that, in formula IV, at least 10 mol % of radicals W_1 that are not in the end groups X and Y are a group of formula



wherein R_1, R_2, and R_3 are as defined above,

and with the proviso that when n in formula IV is 0, then X is hydrogen and Y is the group of formula

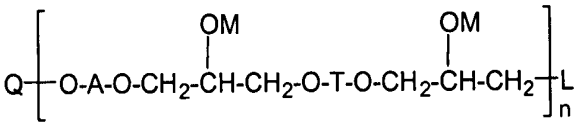


with

(b) a photoinitiator.

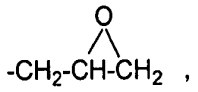
Claim 26 (new): The method of claim 25, wherein said carboxyl group-containing epoxy acrylate of formula IV is prepared by reacting

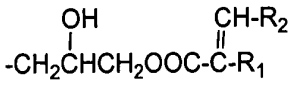
(a) an epoxy acrylate of formula III

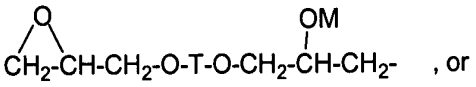


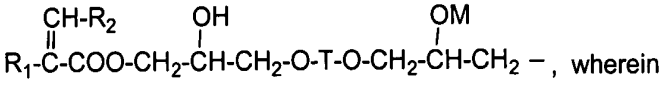
(III)

wherein Q is hydrogen or a group of formula







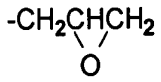


R_1 is –H or –CH_3, and

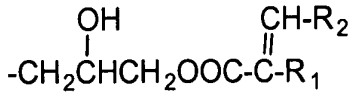
R_2 is –H, -CH_3 or phenyl,

T is the radical of an aromatic bifunctional compound,

M is each independently hydrogen or a group of formula



or



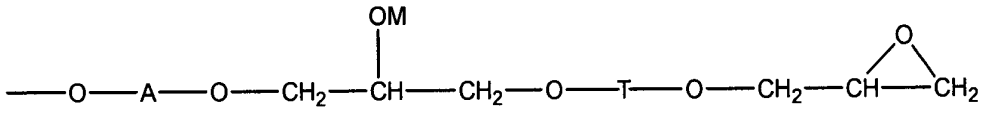
, in which

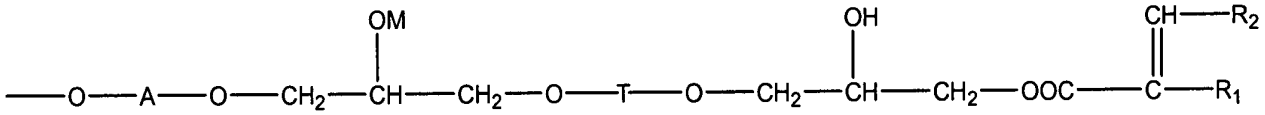
R_1 and R_2 are as defined above,

A is the radical of an aromatic bifunctional compound,

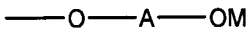
n is an integer from 0 to 300,

L is a group of formula



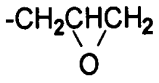


or

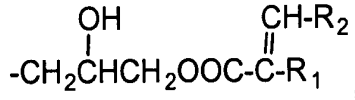


in which M, R_1 and R_2 are as defined above,

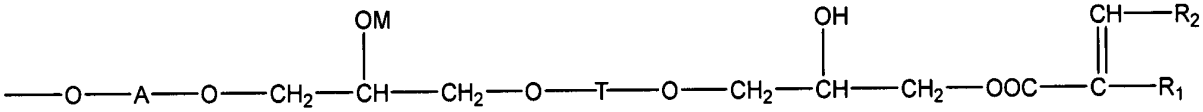
with the proviso that in formula III not all radicals M may be simultaneously hydrogen or a group of formula



but at least 10 mol % of the radicals M that are not present in the end groups Q and L are a group of the formula



and with the proviso that when n in formula III is 0, then Q is hydrogen and L is the group of formula

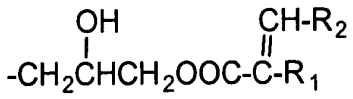


with

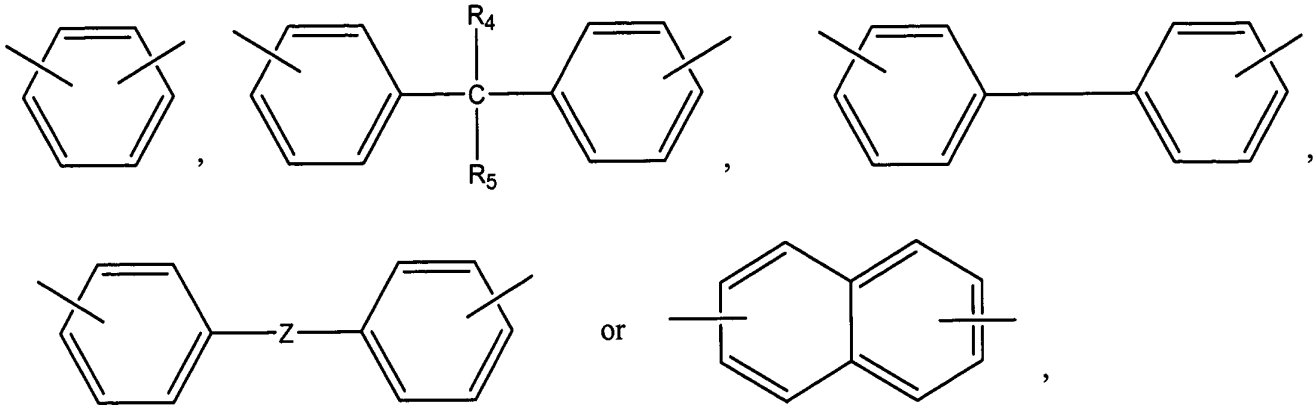
(b) succinic acid anhydride,

in the presence or absence of a catalyst and a polymerisation inhibitor, at elevated temperature.

Claim 27 (new): The method according to claim 26, wherein at least 20-100 mol % of the radicals M that are not present in the end groups Q and L of formula III are a group of the formula

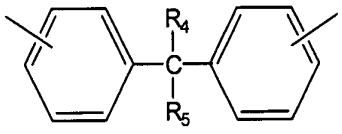


Claim 28 (new): The method according to claim 25 or 26, wherein A and T are each independently of the other a linking group of the formulae



in which R_4 and R_5 are each independently of the other –H or C_1-C_4 alkyl; Z is -S-, -O-, or -SO_2-; and the phenyl radicals of said linking groups are unsubstituted or substituted by halogen or C_1-C_4 alkyl.

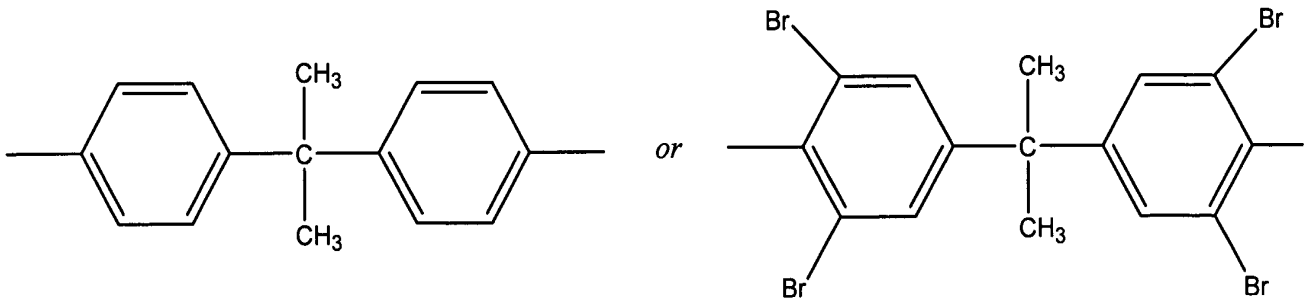
Claim 29 (new): The method according to claim 25 or 26, wherein A and T are each independently of the other a linking group of formula



wherein R_4 and R_5 are each independently of the other –H or C_1-C_4 alkyl, and the phenyl radicals of said linking group are unsubstituted or bromine-substituted.

Claim 30 (new): The method according to claim 29, wherein n is an integer from 0 to 50.

Claim 31 (new): The method according to claim 29, wherein A and T are each independently of the other a linking group of formulae



Claim 32 (new): The method according to claim 25, wherein said catalyst is selected from the group consisting of metal salts, amines and triphenylphosphine.

Claim 33 (new): The method according to claim 32, wherein said catalyst is selected from the group consisting of chromium salts, zirconium salts, triethylamine, benzyldimethylamine, pyridine and dimethylaminopyridine.

Claim 34 (new): The method according to claim 26, wherein an inert solvent is used in the reaction and said solvent is selected from the group consisting of ketones, esters, ethers, aromatic hydrocarbons, and mixtures thereof.

Claim 35 (new): The method according to claim 34, wherein the inert solvent is selected from the group consisting of acetone, methyl ethyl ketone, cyclohexanone, ethyl acetate, butyl acetate, ethoxyethyl acetate, methoxypropyl acetate, dimethoxyethane, dioxane, toluene, benzene, xylenes and mixtures of the foregoing.

Claim 36 (new): The method according to claim 26, wherein the elevated temperature is in the range from 60 to 140°C.

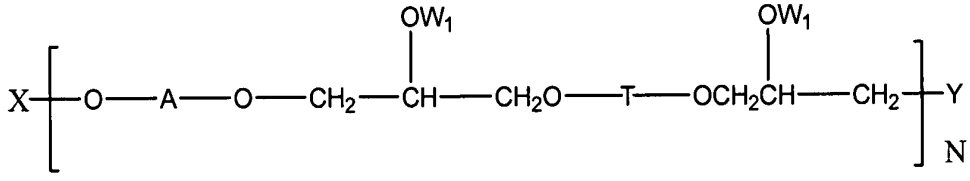
Claim 37 (new): The method according to claim 26, wherein the polymerisation inhibitor is selected from the group consisting of hydroquinone, hydroquinone monomethyl ether, and 2,6-di-tert-butyl-p-cresol.

Claim 38 (new): The method according to claim 26, wherein air, or a mixture of nitrogen and oxygen, is introduced into the reaction medium.

Claim 39 (new): The method according to claim 26, wherein the succinic acid anhydride is used in equimolar amounts with respect to the hydroxyl groups, or in less than equivalent amount.

Claim 40 (new): The method according to claim 25, wherein the photoinitiator is 2-methyl-1-[4-(methylthio)phenyl]-2-morpholino-propane-1.

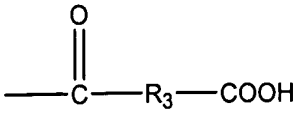
Claim 41 (new): A carboxyl group-containing epoxy acrylate of formula IV

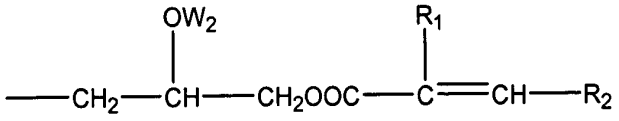


(IV)

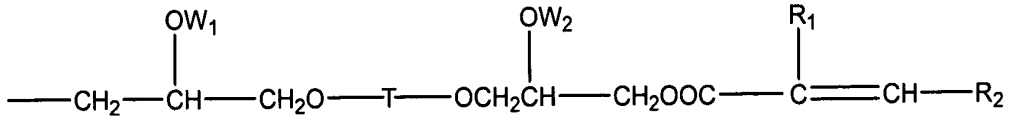
wherein

X is hydrogen or a group of formula





or



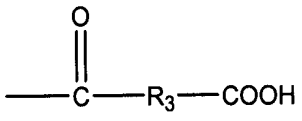
A is the radical of an aromatic bifunctional compound,

R_1 is –H or $–CH_3$,

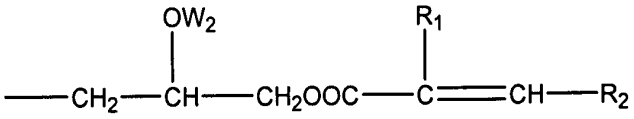
R_2 is –H, $-CH_3$ or phenyl,

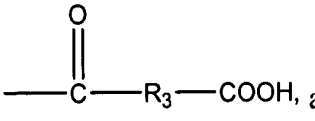
R_3 is the radical of succinic acid anhydride after removal of the anhydride radical,

W_1 is hydrogen or a group of formula

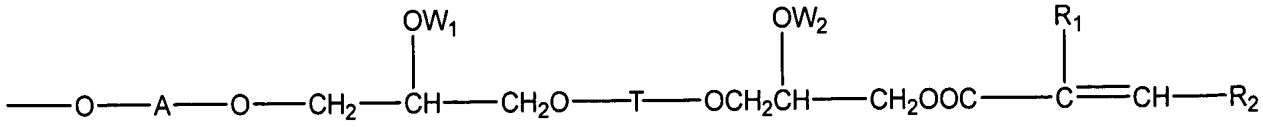


or



W_2 is -H or the group  , and

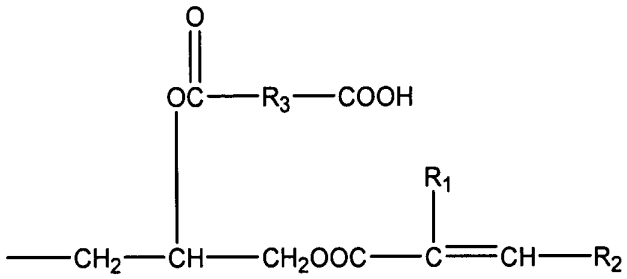
Y is the group of formula  , or



T is the radical of an aromatic bifunctional compound,

n is an integer from 0 to 300,

with the proviso that, in formula IV, at least 10 mol % of radicals W_1 that are not in the end groups X and Y are a group of formula



wherein R_1, R_2, and R_3 are as defined above,

and with the proviso that when n in formula IV is 0, then X is hydrogen and Y is the group of formula